Amendments to the Claims:

Please cancel Claims 46 – 48 without prejudice or disclaimer; amend Claims 41, 43, and 44; and add Claims 53 – 56 as indicated in the following listing of claims, which replaces all prior versions and listings of claims in the application.

Listing of Claims:

1. – 40. (Canceled).

41. (Currently Amended) A plasma torch head comprising:

an outer nozzle disposed substantially symmetrically about a center axis of the outer nozzle;

an inner nozzle disposed within the outer nozzle and substantially symmetrically about the center axis, the inner nozzle including a conduit passing substantially linearly through the inner nozzle along the center axis from an inlet side toward an outlet,

a toroidal transformer core disposed within the inner nozzle and surrounding the conduit; and

a bypass defined by space between the outer nozzle and the inner nozzle, the bypass providing a return path for a secondary plasma current circuit around the toroidal transformer core.

42. (Original) The plasma torch head of claim 41 wherein the inner nozzle comprises metal and further including a dielectric spacer in the inner nozzle to prevent an electric path through the inner nozzle around the toroidal transformer core.

43. (Currently Amended) The plasma torch head of claim 41 wherein:

the conduit is fluidically coupled with a first gas ~~is flown through the conduit~~ source; and

the bypass is fluidically coupled with a second gas ~~if flown through the bypass~~ source, the first gas source providing a ~~being~~ different ~~from~~ gas than the second gas source.

44. (Currently Amended) The plasma torch head of claim 43 wherein the first gas ~~is~~ source comprises an oxygen source and the second gas ~~is either~~ source comprise a propane source or a hydrogen source.

45. (Original) The plasma torch head of claim 41 further comprising a primary coil disposed to couple electro-magnetic energy to the toroidal transformer core wherein the primary coil and the toroidal transformer core are enclosed within the inner nozzle.

46. – 52. (Canceled).

53. (New) The plasma torch head of claim 41 wherein the outer nozzle is tapered from the inlet side towards the outlet to have a narrower width at the outlet than at the inlet side.

54. (New) The plasma torch head of claim 53 wherein the inner nozzle comprises an inlet-side portion and an outlet-side portion separated by a dielectric spacer, the outlet side portion being tapered from the dielectric spacer to have a narrower width at the outlet than at the dielectric spacer.

55. (New) The plasma torch head of claim 54 wherein the toroidal transformer core is disposed within the inlet-side portion of the inner nozzle.

56. (New) The plasma torch head of claim 41 wherein the conduit is substantially cylindrically symmetric about the center axis.